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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/728,603 | 12/04/2003 | I-Jin Yang | B-5316 621543-3 | 9771 |
| 36716 | 7590 | 08/16/2004 | EXAMINER | |
| LADAS & PARRY 5670 WILSHIRE BOULEVARD, SUITE 2100 LOS ANGELES, CA 90036-5679 | | | KING, BRADLEY T | |
| | | | ART UNIT | PAPER NUMBER |

3683

DATE MAILED: 08/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|------------------------------------|--|
| Office Action Summary | Application No. 10/728,603 | Applicant(s) YANG, I-JIN | |
| | Examiner Bradley T King | Art Unit 3683 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>5/10/, 5/20, 12/04</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The application listed on the IDS submitted 5/05/2004 has been lined through, as it is neither a patent nor a publication. The corresponding PG publication US 20040113487 has been considered and is listed on the attached PTO-892.

Drawings

Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by DE 10013269.

DE 100 13 269 discloses all the limitations of the instant claims including: a piston 3 installed in a bore of a modulator block 1 so as to rectilinearly reciprocate in the bore by an eccentric rotation of an eccentric shaft 2 of a drive motor, a plug 6 mounted to the bore to be opposite to the piston; a return spring 5 placed between the piston and the plug to elastically bias the piston in a predetermined direction relative to the plug; an outlet path 10 defined between an inner circumferential surface of the bore and an outer circumferential surface of the plug; and an outlet check valve 11 installed in the outlet path, the outlet check valve being elastically deformed to discharge brake oil during an oil-discharging mode, and elastically restoring an original shape thereof to prevent a reverse flow of the discharged brake oil during an oil-drawing mode. See figure 5.

Regarding claim 2, the outlet check valve comprises a ring-shaped elastic body 11, with an annular groove formed along a central line of an end surface of the ring-shaped elastic body (between 12 and 13), so that the outlet check valve is elastically

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deformed and elastically restores the original shape thereof, according to a pressure of the brake oil acting on the outlet check valve.

Regarding claim 3, the plug comprises an inlet port 23 to draw the brake oil into the pump; an inlet path to guide the brake oil from the inlet port; a closing body 25 installed in an enlarged diameter part of the inlet path to open or close the inlet path; an inlet valve seat provided on a predetermined intermediate portion of the inlet path to be in contact with the closing body, thus opening or closing the inlet path in conjunction with the closing body; a support spring 21 to elastically bias the closing body in a predetermined direction; and a spring retainer 21 to maintain both the closing body and the support spring within the enlarged diameter part of the inlet path.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over DE 100 13 269 in view of DE 198 29 124.

DE 100 13 269 discloses all the limitations of the instant claim with exception to a sealing member placed around the outer circumferential surface of the plug, thus preventing a leakage of the brake oil through a junction between the inner circumferential surface of the bore and the outer circumferential surface of the plug.

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DE 100 13 269 appears to show only an interference fit to seal the junction between the bore and the plug 6. Seals are well known in the art to prevent leakage between various components and further demonstrated by DE 198 29 124 (seal 15). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a seal member as taught by DE 198 29 124 in the junction of DE 100 13 269 to ensure proper sealing of the plug.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Risch et al, Nelson et al, Nakazawa et al and Stegmaier. All show pump arrangements.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradley T King whose telephone number is (703) 308-8346. The examiner can normally be reached on 11:00-7:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Lavinder can be reached on (703) 308-3421. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BTK


DOUGLAS C. BUTLER
PRIMARY EXAMINER
